

State of California
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, LOS ANGELES REGION

ORDER NO. 87-45

WATER RECLAMATION REQUIREMENTS
FOR

CITY OF SAN BUENAVENTURA
(Ventura Water Renovation Facility)
(File No. 57-68)

6/90

The California Regional Water Quality Control Board, Los Angeles Region, finds:

1. City of San Buenaventura (hereinafter referred to as "Reclaimer") operates the Ventura Water Renovation Facility, located at 1400 Spinnaker Drive, Ventura, California, with a design flow capacity of 14 million gallons per day (mgd). The plant discharges all or part of its treated effluent to Olivas Park and Buenaventura Municipal golf courses to be used for recreational impoundment and turf irrigation, and to the Ventura Port District for landscape irrigation under requirements contained in Order 80-34, adopted by this Board on July 28, 1980. The Average flow for 1986 was 8.64 mgd to the Santa Clara Tidal Prism and 0.67 mgd for irrigation purpose.
2. Surface water discharge to the Santa Clara Tidal Prism is in accordance with a National Pollution Discharge Elimination System permit (NPDES Permit No. CA0053651) adopted by this Board.
3. The water reclamation treatment consists of primary sedimentation, activated sludge, biofiltration, secondary sedimentation, filtration, chlorination, dechlorination, and ponding for storage.
4. A review of the current requirements has been conducted by Board staff in accordance with California Administration Code, Title 23, Chapter 3, Subchapter 9, Article 2, Section 2232.2.
5. The areas of irrigation and impoundment reuse overlies ground water in the Oxnard Hydrologic Subarea. Ground waters in the Oxnard Hydrologic Subarea are beneficially used for municipal and domestic supply, agricultural supply, and industrial service and process supply. However, the ground waters of the shallow semipерched zone are of very poor

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quality and are not beneficially used in any significant amounts.

6. The Board adopted a Revised Water Quality Control Plan for Santa Clara River Basin on March 27, 1978. The Plan contains water quality objectives for ground water in the Oxnard Hydrologic Subarea. The requirements contained in this Order, as they are met, will be in conformance with the goals of the Water Quality Control Plan.
7. Section 13523 of the California Water Code provides that a Regional Board, after consulting with and receiving the recommendations of the State Department of Health Services and after any necessary hearing, shall, if it determines such action to be necessary to protect the public health, safety, or welfare, prescribe water reclamation requirements for water which is used or proposed to be used as reclaimed water. Section 13523 further provides that such requirements shall include, or be in conformance with, the statewide reclamation criteria.
8. The use of reclaimed water for impoundments or for irrigation could affect the public health, safety, or welfare; requirements for such use are therefore necessary in accordance with Section 13523 of the Water Code.
9. This project involves an existing facility and as such is exempt from the provisions of the California Environmental Quality Act in accordance with California Administrative Code, Title 14, Chapter 3, Section 15301.

The Board has notified the Reclaimer and interested agencies and persons of its intent to prescribe water reclamation requirements for this facility and has provided them with an opportunity to submit their written views and recommendations.

The Board in a public meeting heard and considered all comments pertaining to the direct beneficial use and to the tentative water reclamation requirements.

IT IS HEREBY ORDERED, that City of San Buenaventura, shall comply with the following:

A. Reclaimed Water Limitations

1. Reclaimed water shall be limited to treated domestic wastewater only, as proposed.

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2. Reclaimed water shall not contain constituents in excess of the following limits:

<u>Constituent</u>	<u>Unit</u>	<u>Maximum Limitations</u>
Total dissolved		
solid	mg/l	3,000
Chloride	mg/l	500
Sulfate	mg/l	1,000
Boron	mg/l	--

3. The pH of reclaimed water shall at all times be within the range 6.0 to 9.0.
4. Reclaimed water shall not contain trace constituents or other substances in concentrations exceeding the limits contained in the current edition of the California Department of Health Services Drinking Water Standards or in excess of action levels established by the State Department of Health Services.
5. Radioactivity shall not exceed the limits specified in Title 22, Chapter 15, Article 5, Sections 64441 and 64443, California Administrative Code, or subsequent revisions.
6. Reclaimed water shall not cause the nitrogen content in the receiving ground water to exceed the objectives in the Water Quality Control Plan.
7. Reclaimed water shall not contain concentrations of chemical constituents in amounts that adversely affect such beneficial use as agricultural supply.
8. Total identifiable chlorinated hydrocarbon pesticides shall not be present at concentrations detectable within the accuracy of analytical methods prescribed in "Standard Methods for the Examination of Water and Wastewater", latest edition, or other equivalent methods approved by the Executive Officer.

B. Specifications for Use of Reclaimed Water

1. Reclaimed water used for the irrigation of golf courses, cemeteries, freeway landscapes, and landscapes in other areas where the public has similar access or exposure shall be at all times an adequately disinfected, oxidized wastewater.

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The wastewater shall be considered adequately disinfected if the median number of coliform organisms in the effluent does not exceed 23 per 100 milliliters, as determined from the bacteriological results of the last 7 days for which analyses have been completed, and the number of coliform organisms does not exceed 240 per 100 milliliters in any two consecutive samples.

Oxidized wastewater means wastewater in which the organic matter has been stabilized, is nonputrescible, and contains dissolved oxygen.

Disinfected wastewater means wastewater in which the pathogenic organisms have been destroyed by chemical, physical or biological means.

2. Reclaimed water used for the irrigation of parks, playgrounds, schoolyard, and other areas where the public has similar access or exposure shall be at all times an adequately disinfected, oxidized, coagulated, clarified, filtered wastewater or a wastewater treated by a sequence of unit processes that will assure an equivalent degree of treatment and reliability.

The wastewater shall be considered adequately disinfected if the median number of coliform organisms in the effluent does not exceed 2.2 per 100 milliliters, as determined from the bacteriological results of the last 7 days for which analyses have been completed, and the number of coliform organisms does not exceed 23 per 100 milliliters in any sample.

A coagulated wastewater means an oxidized wastewater in which colloidal and finely divided suspended matter have been destabilized and agglomerated by the addition of suitable floc-forming chemicals or by an equally effective method.

A filtered wastewater means an oxidized, coagulated, clarified wastewater which has been passed through natural undisturbed soils or filter media, such as sand or diatomaceous earth, so that the turbidity as determined by an approved laboratory method does not exceed an average operating turbidity of 2 turbidity units and does not exceed 5 turbidity units more than 5 percent of the time during any 24-hour period.

3. Reclaimed water used as a source of supply in a nonrestricted recreational impoundment shall be at all

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times an adequately disinfected, oxidized, coagulated, clarified, filtered wastewater.

The wastewater shall be considered adequately disinfected if at some location in the treatment process the median number of coliform organisms does not exceed 2.2 per 100 milliliters and the number of coliform organisms does not exceed 23 per 100 milliliters in more than one sample within any 30-day period. The median value shall be determined from the bacteriological results of the last 7 days for which analyses have been completed.

4. Reclaimed water used as a source of supply in a restricted recreational impoundment shall be at all times an adequately disinfected, oxidized wastewater.

The wastewater shall be considered adequately disinfected if at some location in the treatment process the median number of coliform organisms does not exceed 2.2 per 100 milliliters, as determined from the bacteriological results of the last 7 days for which analyses have been completed.

5. Reclaimed water used as a source of supply in a landscape impoundment shall be at all times an adequately disinfected, oxidized wastewater.

The wastewater shall be considered adequately disinfected if at some location in the treatment process the median number of coliform organisms does not exceed 23 per 100 milliliters, as determined from the bacteriological results of the last 7 days for which analyses have been completed.

6. Reclaimed water shall not be directly used for uses other than those enumerated above until requirements for these uses have been established by this Board in accordance with Section 13523 of the California Water Code, unless the Board waives such requirements or finds that the above cited standards are applicable to these uses.

7. Reclaimed water uses shall meet the requirements specified in the "Guidelines for Use of Reclaimed Water" issued by the State Department of Health Services.

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8. Reclaimed water used for irrigation shall be retained on the areas of use and shall not be allowed to escape as surface flow except as provided for in a National Pollutant Discharge Elimination System Permit.

For the purpose of this requirement, however, minor amounts of irrigation return water from peripheral areas shall not be considered a violation of this Order provided the discharge meets the requirements contained in a National Pollutant Discharge Elimination System Permit issued to the City of San Buenaventura (Ventura Water Renovation Facility).

9. Reclaimed water shall be applied at such a rate and volume as not to exceed vegetative demand and soil moisture conditions. Special precautions must be taken to prevent clogging of spray nozzles, to prevent overwatering and to exclude the production of runoff. Pipelines shall be maintained so as to prevent leaks.
10. Reclaimed water used for irrigation shall not be allowed to run off into recreational lakes unless it meets the criteria for such lakes.

C. General Requirements

1. The discharge or use of raw or inadequately treated sewage at any time is prohibited.
2. Reclaimed water shall not be used for irrigation during periods of rainfall and/or runoff.
3. Standby or emergency power facilities and/or sufficient capacity shall be provided for reclaimed water storage during rainfall or in the event of plant upsets or outages, and at times when spray irrigation cannot be practiced.
4. Reclaimed water use or disposal shall not result in earth movement in geologically unstable areas.
5. Adequate facilities shall be provided to protect the sewage treatment and reclamation facilities from damage by storm flows and runoff.
6. Adequate freeboard shall be maintained in reclaimed water storage pond to ensure that direct rainfall will not cause overtopping.

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7. Neither treatment of waste nor any reclaimed water use or disposal shall cause pollution or nuisance.
8. Water reclamation and reuse or disposal shall not result in problems due to breeding of mosquitoes, gnats, midges, or other pests.
9. Reclaimed water use or disposal shall not impart tastes, odors, color, foaming, or other objectionable characteristics to receiving ground waters.
10. Reclaimed water use or disposal which could affect receiving ground waters shall not contain any substance in concentrations toxic to human, animal, or plant life.
11. Odors of sewage origin shall not cause a nuisance.

D. Provisions

1. A copy of these requirements shall be maintained at the reclamation facility so as to be available at all times to operating personnel.
2. In the event of any change in name, ownership, or control of these waste treatment and reclamation facilities, the Reclaimer shall notify this Board of such change and shall notify the succeeding owner or operator of the existence of this Order by letter, copy of which shall be forwarded to the Board.
3. In accordance with Section 13522.5 of the Water Code and Section 60323 of the Wastewater Reclamation Criteria, the Reclaimer shall file an engineering report, prepared by a properly qualified engineer registered in California, of any material change or proposed change in character, location or volume of the reclaimed water or its uses to the Board and State Department of Health Services.
4. The Reclaimer shall file with the Board technical reports on self monitoring work performed according to the detailed specifications contained in the Monitoring and Reporting Programs, as directed by the Executive Officer.
5. The Reclaimer shall notify this Board by telephone within 24 hours of any violations of reclaimed water use conditions or any adverse conditions as a result of

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the use of reclaimed water from this facility; written confirmation shall follow within one week.

6. The Reclaimer shall notify Board staff by telephone immediately of any confirmed coliform counts that could cause a violation of the 7-day median limit, including the date(s) thereof. This information shall be confirmed in the next monitoring report; in addition, for any actual coliform limit violations that occurred, the report shall also include the reasons for the high coliform results, the steps being taken to correct the problem (including dates thereof), and the steps being taken to prevent a recurrence.
7. These requirements do not exempt the Reclaimer from compliance with any other laws, regulations, or ordinances which may be applicable; they do not legalize this reclamation facility, and they leave unaffected any further restraint on the use of reclaimed water at this site which may be contained on other statutes or required by other agencies.
8. The Reclaimer shall be responsible to insure that all users of reclaimed water comply with the specifications and requirements for such use.
9. This Order does not alleviate the responsibility of the Reclaimer to obtain other necessary local, state, and federal permits to construct facilities necessary for compliance with this Order; nor does this Order prevent imposition of additional standards, requirements, or conditions by any other regulatory agency. Expansion of this facility from its current capacity shall be contingent upon issuance of all necessary permits, including a conditional use permit.
10. In accordance with Section 13260 of the Water Code, the Reclaimer shall file a report of any material change or proposed change in character, location or volume of the discharge.
11. Supervisors and operators of this publicly owned wastewater treatment plant shall possess a certificate of appropriate grade as specified in California Administrative Code, Title 23, Chapter 3, Subchapter 14, Section 2455 and 2460.
12. The Reclaimer shall provide to each user of reclaimed water from Ventura Water Renovation Facility a copy of

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these requirements, to be maintained at the user's facility as to be available at all times to operating personnel.

13. For any extension of the reclaimed water system, the Reclaimer shall submit a report detailing the extension for the approval of the Executive Officer. Following construction, as built drawings shall be submitted to the Executive Officer for approval prior to use of reclaimed water.
14. The Reclaimer shall submit to the Board within 60 days of the adoption of this Order, a fail-safe procedure for approval by the Executive Officer.
15. Order No. 80-34 adopted by this Board on July 28, 1980, is hereby rescinded.

I, Robert P. Ghirelli, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on April 27, 1987.

Robert P. Ghirelli

ROBERT P. GHIRELLI, D.Env.
Executive Officer

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State of California
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, LOS ANGELES REGION

MONITORING AND REPORTING PROGRAM NO. 6190
FOR

CITY OF SAN BUENAVENTURA
(Ventura Water Renovation Facility)
(File No. 57-68)

The Reclaimer shall implement this monitoring program on the effective date of this Order.

Monitoring reports shall be submitted by the dates in the following schedule:

<u>Reporting period</u>	<u>Report Due</u>
January - March	April 15
April - June	July 15
July - September	October 15
October - December	January 15

The first monitoring report under this program shall be submitted by July 15, 1987.

By January 30 of each year, the Reclaimer shall submit an annual report to the board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. In addition, the Reclaimer shall discuss the compliance record and the corrective actions taken or planned which may be needed to bring the discharge into full compliance with the Requirements.

Values obtained for the NPDES monitoring report during periods of discharge to surface waters may be reported here in lieu of duplicate testing, if representative. However, non-NPDES self-monitoring reports shall be submitted separately from the NPDES monitoring reports.

Reclaimed Water Monitoring

A sampling station shall be established where representative samples of reclaimed water can be obtained. Reclaimed water samples may be obtained at a single station provided that station is representative of the quality at all discharge points. Each sampling station shall be identified. The following shall constitute the reclaimed water monitoring program:

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Minimum Frequency of Analysis</u>
Turbidity ¹	NTU	continuous	-----
Total flow ²	gallon	continuous	-----
Coliform group ³	MPN/100ml	grab	daily
pH	pH units	grab	daily
Total dissolved solids	mg/l	24-hr composite	monthly
Chloride	mg/l	24-hr composite	monthly
Boron	mg/l	24-hr composite	monthly
Sulfate	mg/l	24-hr composite	monthly
Arsenic	mg/l	24-hr composite	quarterly
Barium	mg/l	24-hr composite	quarterly
Cadmium	mg/l	24-hr composite	quarterly
Chromium	mg/l	24-hr composite	quarterly
Lead	mg/l	24-hr composite	quarterly
Mercury	mg/l	24-hr composite	quarterly
Selenium	mg/l	24-hr composite	quarterly
Silver	mg/l	24-hr composite	quarterly
Cyanide	mg/l	24-hr composite	quarterly
Nitrate	mg/l	24-hr composite	quarterly
Fluoride	mg/l	24-hr composite	quarterly
Radioactivity	pCi/l	24-hr composite	quarterly

¹Required only for applications having a turbidity limit. The average value recorded each day and amount of time that 5 NTU was exceeded each day shall be reported. Turbidity samples may be obtained anywhere in the treatment process subsequent to the filtration procedure.

²Shall report the daily volume of reclaimed water used at each site of use.

³Samples shall be obtained at some point in the treatment process at a time when wastewater flow and characteristics are most demanding on the treatment facility and disinfection procedures. The location(s) of the sampling point(s) and any changes thereto must be approved by the Executive Officer, and proposed changes shall not be made until such approval has been granted. If reclaimed water is used for irrigation of golf courses, cemeteries, freeway landscapes, parks, playgrounds, schoolyards, or other areas where the public has similar access or exposure, samples shall be obtained subsequent to the chlorination procedure. Coliform values obtained must meet the strictest requirement specified for all uses during periods of multiple use, unless separate coliform analyses are obtained at each particular point of use.

Total identifiable

chlorinated

hydrocarbon

mg/l

grab

quarterly

General Provisions for Sampling and Analysis

All sampling, sample preservation, and analyses shall be performed in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants", promulgated by the United States Environmental Protection Agency.

All chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the State Water Resources Control Board or approved by the Executive Officer.

General Provisions for Reporting

For every item where the requirements are not met, the Reclaimer shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time and submit a timetable for correction.

The Reclaimer shall maintain all sampling and analytical results, including strip charts; date, exact place, and time of sampling; dates analyses were performed; analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Board.

In reporting the monitoring data, the Reclaimer shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized to demonstrate compliance with Water Reclamation Requirements and, where applicable, shall include results of receiving water observations.

The Reclaimer shall file a report with this Board describing the purposes for which reclaimed water from this facility is used, estimating quantities used for each type of use, depicting on a map or drawing the area(s) of use, and stating the name and address of each user of reclaimed water if other than the Reclaimer. This report shall be updated at least annually, and shall be included with the annual report due January 30th each year.

Each quarterly report shall include a statement that all reclaimed water was used only as specified in the requirements during the quarter.

If no water was delivered for reuse during the quarter, the report

shall so state.

Monitoring reports shall be signed by:

- a. In the case of corporations, by a principal executive officer at least of the level of vice-president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which discharge originates;
- b. In the case of a partnership, by a general partner;
- c. In the case of a sole proprietorship, by the proprietor;
- d. In the case of municipal, state or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.

Each report shall contain the following completed declaration:

"I declare under penalty of perjury that the foregoing is true and correct.

Executed on the _____ day of _____ at _____.

(Signature)

(Title)"

Ordered by

Robert P. Ghirelli
Executive Officer

April 27, 1987
Date

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